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# INTERIM POPULATION PROJECTION FOR THE ELECTION DISTRICTS OF THE STATE OF MD.

## FALL 1977

Maryland  
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M32  
no. 329  
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3 P 32

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October 17, 1977

MEMORANDUM

TO: Larry Fogelson  
FROM: David Spottheim  
RE: Interim Population Projection For the Election Districts of the State

Attached please find two copies of a computer printout entitled "Interim Population Projection for the Election Districts of the State of Maryland." The prints depict the initial result(product) of the population projection for the years 1975-2000 at five-year intervals.

The central theme behind this interim projection is that an Election District (MCD) is not a self-contained geo-economic and, as such, the population projection is influenced by the population growth in its respective county and region. To realize the above empirically, a hybrid methodology has been employed:

- a) First extrapolation equations (based on a recent article in the July 1977 issue of JAIP) were developed and used to estimate (or project) the 1975 population, followed by
- b) Moving average procedures were developed to project the MCD's population for the years 1980-2000, and finally
- c) the distributions of the projected MCD's population (generated in the above phase) were adjusted to coincide with the control total of the most recent (May 1977) county population projection.

A cursory examination of the figures generated by the aforementioned methodology is very promising. In most counties the discrepancies of the projections before and after adjustment are with the  $\pm 10\%$  limit which was my aim throughout this endeavor. If time will permit an attempt will be made to achieve such a limit for all counties.

Since throughout this phase of the project experimentation with numerous techniques were carried out, the experience gained could be used to develop criteria for evaluating small area projections that have been submitted by counties for Departmental approval. This matter will be discussed in a forthcoming working paper summarizing the interim phase of the Election District Study.

cc: Benjamin  
Miller

INTERIM POPULATION  
PROJECTION FOR THE  
ELECTION DISTRICTS  
OF THE STATE OF MD.

OCT. 1977



November 28, 1977

MEMORANDUM

TO: Richard Gucker *D. S.*

FROM: David Spottheim - Research Division

RE: Interim Population Projection For the Election Districts of the State of Maryland

As per request by your staff, attached please find a copy of a computer printout entitled "Interim Population Projection for the Election Districts of the State of Maryland." The prints depict the initial result (product) of the population projection for the years 1975-2000 at five-year intervals.

The central theme behind this interim projection is that an Election District (MCD) is not a self-contained geo-economic unit and, as such, the population projection is influenced by the population growth in its respective county and region. To realize the above empirically, a hybrid methodology has been employed:

- a) First extrapolation equations (based on a recent article in the July 1977 issue of JAIP) were developed and used to estimate (or project) the 1975 population, followed by
- b) Moving average procedures were developed to project the MCD's population for the years 1980-2000, and finally
- c) The distributions of the projected MCD's population (generated in the above phase) were adjusted to coincide with the control total of the most recent (May 1977) county population projection.

A cursory examination of the printout will reveal that the layout is as follows: County name, Election Districts (MCD) No., actual population by MCD for the years 1960, 1970, and 1975 (if any), as well as forecasted figures for the years 1975-2000. Please note that the row denoted by "Sum & Co. Proj. used for Adj." contains figures of the recent county population projection. These figures were used as control total. Each column (i.e. Pop. Distr. in the MCD's) has been adjusted to coincide with its control total.

Finally, please note that this projection is for internal use by Department of State Planning staff only.

DS:mv

cc: Dr. Miller  
Mr. Benjamin



EXTENDED 1100/40 SVC. SEE 'NEWS,L SYSTEMHOURS'  
RUNID: DAVE 11/25/77 15:20:02 LAST RUN: 11/23 15:58

QASG,A POP.  
READY  
QASG,A POSED.  
READY  
QASG,A PM.  
READY  
QFOR POP,PRO3,TEST  
FOR SE3A-11/25/77-15:21:56 (16)  
MATTY W,132  
-QWCOMPLETE  
QMAP,I ,TEST  
END FOR  
MAP28R2H 11/25-15:23 TEST  
QSTATUS  
START=013153, PROG SIZE(I/D)=5438\*2887  
END MAP 2271 MSEC.  
RUNS: DAVE\*/OPEN(0)  
DEMAND: 39, BATCH: 8, BACKLOG: 22  
\*\*  
QUSE 10.,PM.  
READY  
QXQT TEST  
QADD POP,CO  
QADD POP,COA

## ALLEGANY

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000	
1	596.	584.	0.	557.	544.	561.	579.	589.	593.							
2	843.	975.	0.	1020.	946.	1027.	1058.	1079.	1086.							
3	1328.	1260.	0.	1172.	1144.	1179.	1216.	1239.	1248.							
4	12652.	12509.	0.	11862.	11593.	11940.	12312.	12544.	12637.							
5	7944.	6890.	0.	6160.	6015.	6201.	6394.	6515.	6590.							
6	8453.	7924.	0.	7326.	7154.	7374.	7604.	7748.	7802.							
7	3250.	5106.	0.	6013.	5871.	6052.	6241.	6359.	6403.							
8	5231.	4553.	0.	4076.	3981.	4104.	4231.	4311.	4342.							
9	1315.	1393.	0.	1398.	1365.	1407.	1450.	1477.	1489.							
10	1617.	1464.	0.	1332.	1301.	1341.	1382.	1408.	1417.							
11	962.	1293.	0.	1453.	1412.	1463.	1508.	1537.	1548.							
12	2262.	2546.	0.	2629.	2568.	2645.	2728.	2780.	2800.							
13	2435.	2320.	0.	2161.	2110.	2176.	2243.	2286.	2302.							
14	1209.	973.	0.	871.	851.	877.	904.	921.	927.							
15	2186.	1114.	0.	997.	974.	1004.	1035.	1054.	1062.							
16	2165.	2181.	0.	2136.	2036.	2150.	2217.	2258.	2275.							
17	356.	164.	0.	147.	143.	148.	152.	155.	156.							
18	1476.	1391.	0.	1289.	1259.	1298.	1338.	1363.	1373.							
19	767.	786.	0.	776.	758.	781.	806.	821.	827.							
20	1931.	2047.	0.	2054.	2016.	2068.	2132.	2172.	2187.							
21	1263.	1450.	0.	1512.	1476.	1521.	1568.	1598.	1609.							
22	4247.	3115.	0.	2792.	2726.	2810.	2897.	2952.	2973.							
23	4284.	4108.	0.	3839.	3749.	3865.	3984.	4060.	4084.							
24	1655.	1764.	0.	1775.	1733.	1786.	1842.	1877.	1890.							
25	284.	776.	0.	951.	920.	957.	987.	1025.	1042.							
26	2031.	4159.	0.	5096.	4977.	5129.	5289.	5389.	5427.							
27	390.	438.	0.	451.	441.	455.	469.	478.	481.							
28	1980.	514.	0.	460.	449.	463.	478.	486.	490.							
29	5899.	7410.	0.	8064.	7875.	8117.	8370.	8528.	8588.							



30	734.	480.	0.	451.	440.	453.	468.	476.	480.
31	1471.	1264.	0.	1132.	1105.	1139.	1175.	1197.	1205.
32	723.	957.	0.	1068.	1043.	1075.	1108.	1130.	1137.
33	181.	171.	0.	158.	155.	159.	165.	167.	169.

## ANNE ARUNDEL

MCD 1960 1970 1975 PROJ 1975 PROJ 1980 PROJ 1985 PROJ 1990 PROJ 1995 PROJ 2000

1	10322.	14207.	0.	17438.	20053.	22719.	26104.	28861.	31477.
2	14082.	25312.	0.	28427.	32691.	37912.	42677.	47244.	51567.
3	58992.	96127.	0.	105382.	121189.	136366.	151476.	165233.	176836.
4	37329.	55098.	0.	70445.	81013.	94202.	110731.	124471.	138014.
5	50214.	60868.	0.	69315.	79712.	86185.	95073.	102093.	106233.
6	28006.	35079.	0.	40729.	46839.	51253.	57141.	61807.	65420.
7	4144.	5310.	0.	6249.	7187.	7930.	8704.	9682.	10329.
8	3545.	5138.	0.	6071.	6982.	7821.	8631.	9378.	9933.

BEFORE ADJUSTMENT 298149. 306166. 330569. 343068. 359804. 390118.  
 SUM & CO. PROJ. USED FOR ADJ 344056. 395657. 444836. 500756. 548771. 591209.

## BALTIMORE CO.

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	53809.	63642.	69435.	64685.	68113.	73465.	79634.	85613.	92769.
2	27504.	55618.	65573.	62524.	65837.	70966.	76925.	82682.	89563.
3	26999.	38305.	44498.	42926.	45201.	48723.	52813.	56767.	61495.
4	15604.	30691.	34033.	34000.	35802.	38592.	41832.	44963.	48704.
5	2551.	3120.	3287.	3228.	3400.	3645.	3973.	4270.	4525.
6	1627.	2076.	2433.	2198.	2314.	2425.	2704.	2906.	3142.
7	4167.	4714.	4682.	4678.	4925.	5231.	5615.	5985.	6412.
8	21403.	38563.	45542.	40791.	42052.	46298.	50185.	53941.	56435.
9	86045.	192467.	113491.	104374.	109405.	118735.	123758.	133521.	150238.
10	3740.	5647.	6070.	5438.	5726.	6173.	6594.	7054.	7392.
11	20582.	26514.	30541.	28379.	29813.	32111.	34715.	37528.	40654.
12	70659.	72261.	64892.	67897.	71496.	73372.	76423.	79747.	83072.
13	35708.	39853.	39224.	39260.	41339.	43696.	46716.	49654.	52977.
14	27742.	36409.	42686.	39134.	41208.	44138.	48148.	51751.	56062.
15	94283.	101191.	105785.	97602.	102771.	107171.	113269.	119398.	126227.
BEFORE ADJUSTMENT					672859.	687504.	720748.	749176.	780573.
SJM & CO. PROJ. USED FOR ADJ					637114.	670873.	715221.	767505.	820711.
									1710.

## CALVERT

MCD	1960		1970		1975		PROJ 1975		1980		PROJ 1980		1985		PROJ 1985		1990		PROJ 1990		1995		PROJ 1995		2000				
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2							
1	5423.	6404.	0.	7765.	7950.	7869.	8028.	8357.	8427.	8520.	8620.	8720.	8820.	8920.	9020.	9120.	9220.	9320.	9420.	9520.	9620.	9720.	9820.	9920.	10020.				
2	4760.	6211.	0.	7955.	8154.	8357.	8574.	9153.	9312.	9412.	9512.	9612.	9712.	9812.	9912.	10012.	10112.	10212.	10312.	10412.	10512.	10612.	10712.	10812.	10912.				
3	5643.	8067.	0.	10862.	11.33.	12367.	13724.	13744.	13933.	14133.	14333.	14533.	14733.	14933.	15133.	15333.	15533.	15733.	15933.	16133.	16333.	16533.	16733.	16933.	17133.				
<b>BEFORE ADJUSTMENT</b>				24252.	24960.	28456.	31339.	32730.	34037.	<b>ADJUSTMENT</b>				26582.	27246.	28593.	30296.	31240.	31734.	<b>ADJUSTED</b>				26582.	27246.	28593.	30296.	31240.	31734.
<b>SLIM &amp; CO. PROJ. USED FOR ADJ.</b>				26582.	27246.	28593.	30296.	31240.	31734.	<b>ADJUSTMENT</b>				26582.	27246.	28593.	30296.	31240.	31734.	<b>ADJUSTED</b>				26582.	27246.	28593.	30296.	31240.	31734.



## CAROLINE

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	1730.	1887.	2150.	2115.	1917.	2037.	2211.	2248.	2395.						
2	2744.	2817.	3200.	3077.	2966.	2963.	3217.	3270.	3378.						
3	4071.	3771.	4190.	3932.	3714.	3787.	4112.	4130.	4267.						
4	2405.	2675.	3180.	3032.	2864.	2921.	3171.	3223.	3290.						
5	3965.	4037.	4320.	4392.	4158.	4239.	4593.	4668.	4765.						
6	1382.	1313.	1560.	1516.	1432.	1460.	1586.	1611.	1645.						
7	1771.	1812.	2140.	2081.	1973.	2011.	2184.	2210.	2269.						
8	1385.	1399.	1650.	1516.	1432.	1460.	1586.	1611.	1645.						
BEFORE ADJUSTMENT			22296.	23663.	24509.	24995.	25412.	26025.							
SUM & CO. PROJ. USED FOR ADJ			21668.	20467.	20362.	22610.	23070.	23511.							

## CARROLL

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	3603.	4142.	4578.	4792.	5276.	5832.	6542.	7087.	7542.						
2	2114.	2672.	2587.	2591.	2854.	3026.	3160.	3318.	3449.						
3	2130.	2651.	3749.	3755.	4135.	4622.	5206.	5639.	6012.						
4	4368.	6532.	8980.	8643.	9516.	10636.	11980.	12979.	13813.						
5	8431.	11475.	11209.	11228.	12363.	13703.	14004.	14816.	15558.						
6	4230.	5293.	7511.	7524.	8285.	9259.	10430.	11290.	12025.						
7	13175.	16304.	16256.	16284.	17930.	19117.	20182.	21307.	22310.						
8	3410.	5290.	6656.	6767.	7341.	8206.	9243.	10113.	10657.						
9	1350.	1925.	3434.	3440.	3784.	4234.	4768.	5166.	5498.						
10	1080.	1306.	1356.	1358.	1495.	1608.	1725.	1837.	1944.						
11	2032.	2414.	2481.	2485.	2736.	2925.	3121.	3309.	3485.						
12	1649.	1678.	1593.	1596.	1757.	1784.	1825.	1874.	1997.						
13	2420.	3106.	3620.	3802.	4186.	4673.	5270.	5700.	6075.						
14	2735.	4258.	6430.	6441.	7092.	7927.	8929.	9673.	10294.						
BEFORE ADJUSTMENT			80469.	87676.	95115.	104635.	11358.	121774.							
SUM & CO. PROJ. USED FOR ADJ			80607.	87756.	97162.	106385.	114029.	120549.							

## CECIL

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	2515.	2658.	0.	2737.	2940.	3205.	3429.	3563.	3655.						
2	2795.	3352.	0.	3656.	3044.	4281.	4581.	4760.	4812.						
3	12710.	13632.	0.	14131.	15437.	16501.	17704.	18398.	18771.						
4	2696.	3399.	0.	3793.	4143.	4442.	4751.	4937.	5065.						
5	7442.	8928.	0.	9738.	10639.	11405.	12201.	12678.	13005.						
6	4318.	4913.	0.	5355.	5840.	6272.	6710.	6972.	7152.						
7	13125.	13182.	0.	13264.	14490.	15536.	16618.	17269.	17713.						
8	1394.	1491.	0.	1544.	1687.	1803.	1934.	2010.	2061.						
9	1413.	1655.	0.	1787.	1952.	2093.	2239.	2327.	2387.						
BEFORE ADJUSTMENT			57782.	65371.	74690.	80055.	86307.	90566.							
SUM & CO. PROJ. USED FOR ADJ			56005.	61182.	65594.	70168.	72914.	74791.							



MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	3353.	4707.	5633.	5901.	6010.	6735.	7204.	7603.	7700.
2	1089.	1364.	151.	172.	1627.	1750.	1903.	1992.	1973.
3	1962.	2442.	2650.	2804.	2904.	314.	3294.	3750.	3901.
4	2182.	2504.	2910.	2967.	3071.	3284.	3411.	3580.	3737.
5	2056.	2602.	3080.	3017.	3124.	3772.	3437.	3651.	3823.
6	5036.	12607.	16550.	17474.	18057.	2300.	24207.	25541.	2639.
7	9252.	10687.	11604.	11745.	12157.	12690.	12744.	13120.	13541.
8	3598.	5683.	8727.	9214.	9537.	11623.	12765.	13470.	14047.
9	1735.	2129.	2410.	2415.	2510.	2679.	2742.	2863.	2936.
10	2209.	2949.	3315.	3527.	3651.	4019.	4218.	4462.	4657.
<b>BEFORE ADJUSTMENT</b>				57346.	60306.	69402.	77035.	82693.	87141.
<b>SUM &amp; CO. PROJ. USED FOR ADJ.</b>				60546.	62772.	71307.	75796.	79916.	82272.

## DORCHESTER

MCN	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	1528.	1548.	0.	1576.	1535.	1589.	1653.	1721.	1764.						
2	1763.	1753.	0.	1759.	1713.	1774.	1851.	1921.	1970.						
3	1356.	1300.	0.	1282.	1249.	1293.	1342.	1401.	1436.						
4	376.	285.	0.	261.	253.	262.	274.	284.	292.						
5	681.	606.	0.	577.	562.	582.	607.	630.	645.						
6	871.	712.	0.	652.	635.	658.	685.	713.	730.						
7	14797.	13863.	0.	13526.	13170.	13644.	14237.	14777.	15141.						
8	759.	806.	0.	839.	818.	846.	883.	917.	940.						
9	688.	635.	0.	615.	600.	621.	648.	672.	689.						
10	940.	754.	0.	689.	671.	695.	725.	753.	771.						
11	134.	108.	0.	99.	96.	100.	104.	108.	110.						
12	846.	1027.	0.	1139.	1108.	1149.	1178.	1243.	1274.						
13	635.	592.	0.	576.	561.	581.	600.	629.	645.						
14	1101.	2086.	0.	2608.	2540.	2630.	2744.	2849.	2911.						
15	2413.	2532.	0.	2620.	252.	2643.	2757.	2863.	2934.						
16	310.	357.	0.	386.	376.	389.	406.	421.	432.						
17	342.	325.	0.	319.	311.	322.	336.	349.	357.						
18	127.	116.	0.	112.	109.	113.	117.	123.	125.						
BEFORE ADJUSTMENT				30817.	31670.	32027.	32219.	32804.	34550.						
SUM & CO. PROJ. USED FOR ADJ				29634.	28465.	29371.	31132.	32174.	33179.						

## FREDERICK

MCN	1960	1970	1975	PROJ 1975	PROJ 1980	PROJ 1985	PROJ 1990	PROJ 1995	PROJ 2000
1	2396.	2654.	2890.	2369.	2910.	3197.	3415.	3640.	3849.
2	2401.	25908.	25671.	27683.	28453.	30373.	32056.	35123.	37137.
3	2766.	2897.	4013.	3900.	4065.	4349.	4643.	4948.	5232.
4	976.	1140.	1286.	1262.	1315.	1407.	1502.	1601.	1693.
5	4574.	5428.	5694.	6050.	6306.	6747.	7202.	7676.	8115.
6	1176.	1262.	1439.	1345.	1402.	1500.	1601.	1706.	1805.
7	2232.	3014.	3697.	3559.	3709.	3969.	4236.	4515.	4774.
8	1123.	1257.	1474.	1365.	1423.	1522.	1625.	1732.	1831.
9	3596.	4904.	6782.	6005.	6895.	7360.	7564.	8330.	8761.
10	1802.	2053.	2241.	2247.	2342.	2506.	2575.	2851.	3014.



11	1933.	2127.	2306.	2093.	2389.	2556.	2710.	2908.	3075.
12	1565.	1592.	1764.	1657.	1727.	1843.	1972.	2102.	2233.
13	1018.	1556.	1723.	1685.	1757.	1830.	2007.	2139.	2261.
14	1098.	1311.	1761.	1714.	1786.	1911.	2040.	2174.	2298.
15	4067.	4973.	5726.	5618.	5854.	6265.	6687.	7127.	7535.
16	1327.	1685.	1951.	1935.	2017.	2153.	2304.	2456.	2597.
17	1102.	1314.	1453.	1467.	1529.	1637.	1747.	1862.	1969.
18	1448.	1930.	2421.	2165.	2361.	2527.	2697.	2874.	3039.
19	760.	837.	970.	902.	940.	1067.	1074.	1145.	1210.
20	1514.	2121.	2627.	2516.	2623.	2806.	2916.	3103.	375.
21	2042.	3565.	4351.	4064.	4271.	4570.	4873.	5191.	5429.
22	1032.	1076.	1173.	1180.	1235.	1321.	1411.	1503.	1589.
23	892.	1110.	1190.	1264.	1317.	1409.	1504.	1603.	1695.
24	2576.	3511.	3866.	3762.	3921.	4196.	4478.	4773.	5046.
25	3511.	3564.	3959.	3684.	3846.	4115.	4392.	4681.	4919.
26	1759.	2096.	3314.	3225.	3361.	3597.	3839.	4042.	4326.

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

28812. 111932. 131220. 141925. 150430. 160405.  
96154. 100227. 107244. 114177. 122004. 128991.

## GARRETT

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	911.	1079.	0.	1238.	1264.	1262.	1273.	1297.	1339.						
2	1611.	1704.	0.	1925.	1863.	1891.	1873.	1917.	1979.						
3	2423.	2517.	0.	2712.	2760.	2924.	2819.	2871.	2963.						
4	695.	895.	0.	1059.	1091.	1089.	1094.	1120.	1156.						
5	1100.	1071.	0.	1205.	1251.	1249.	1261.	1283.	1325.						
6	850.	974.	0.	1092.	1122.	1121.	1130.	1151.	1186.						
7	1558.	1813.	0.	2063.	2106.	2103.	2122.	2160.	2230.						
8	1561.	1565.	0.	1657.	1692.	1705.	1686.	1717.	1774.						
9	970.	890.	0.	910.	1010.	1021.	1028.	1047.	1081.						
10	956.	1130.	0.	1296.	1322.	1321.	1333.	1357.	1401.						
11	180.	155.	0.	163.	157.	166.	164.	167.	172.						
12	520.	595.	0.	671.	686.	695.	690.	702.	726.						
13	1180.	911.	0.	937.	953.	950.	927.	944.	970.						
14	3235.	3443.	0.	3752.	3830.	3825.	3809.	3830.	4005.						
15	478.	432.	0.	477.	487.	490.	491.	501.	516.						
16	2132.	2302.	0.	2526.	2579.	2575.	2571.	2618.	2703.						

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

23192. 23420. 23782. 24592. 24785. 25087.  
23698. 24190. 24275. 24285. 24731. 25527.

## HARFORD

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	14426.	27977.	0.	31601.	37692.	35867.	38065.	40189.	41862.						
2	23236.	29450.	0.	37193.	39645.	42426.	46781.	49391.	51446.						
3	17375.	30803.	0.	37452.	35657.	37960.	39733.	41978.	43745.						
4	5803.	9320.	0.	11322.	12081.	12861.	14181.	14973.	15596.						
5	7412.	8977.	0.	11057.	11797.	12428.	13532.	14287.	14831.						
6	8510.	9791.	0.	1747.	12526.	12959.	13896.	14636.	15245.						

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

124628. 130901. 144270. 155368. 165923. 176262.  
136381. 145410. 154510. 162248. 175473. 182775.



# HOWARD

P. 6

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	7262.	9613.	8987.	9140.	11307.	13029.	11549.	1153.	11362.
2	9575.	17445.	25091.	22726.	33245.	44190.	48012.	56419.	64191.
3	2721.	3657.	4470.	4049.	5923.	7086.	7069.	7568.	8537.
4	3309.	4250.	5531.	5010.	7329.	8007.	9148.	9845.	11315.
5	4119.	13536.	26079.	23621.	34554.	41946.	50758.	5816.	6120.
6	9166.	13400.	38034.	34489.	50324.	61249.	76205.	84901.	10148.
BEFORE ADJUSTMENT			108192.	115092.	136152.	179869.	214549.	245062.	
SUM & CO. PROJ. USED FOR ADJ			97094.	143751.	176756.	203710.	232921.	263674.	

## KENT

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	2576.	2707.	0.	2807.	2841.	2854.	3031.	2978.	3027.
2	1797.	1840.	0.	1881.	1904.	1995.	2004.	1961.	2001.
3	1919.	1956.	0.	1995.	2019.	2007.	2119.	2082.	2116.
4	3964.	4209.	0.	4390.	4411.	4479.	4757.	4674.	4751.
5	2929.	2889.	0.	2906.	2942.	2895.	3034.	2970.	3018.
6	1320.	1352.	0.	1383.	1391.	1394.	1473.	1447.	1471.
7	976.	1193.	0.	1345.	1361.	1405.	1492.	1466.	1490.
BEFORE ADJUSTMENT			15779.	16082.	16970.	17177.	17575.	17703.	
SUM & CO. PROJ. USED FOR ADJ			16706.	16911.	16928.	17910.	17586.	17675.	

## MONTGOMERY

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	2137.	3452.	3890.	3705.	4624.	4569.	5024.	5434.	5813.
2	5136.	3980.	4260.	4302.	4674.	4813.	5137.	5773.	6175.
3	1920.	1993.	4240.	4048.	4393.	4983.	5490.	5930.	6353.
4	37896.	81903.	90220.	84755.	92073.	104324.	114930.	124306.	132976.
5	20924.	49506.	53750.	53607.	58235.	65934.	72698.	78641.	84119.
6	3526.	4900.	8260.	7887.	8567.	9707.	10695.	11570.	12375.
7	83197.	96712.	97260.	99701.	109707.	108121.	119313.	129625.	138563.
8	5320.	12890.	22500.	21483.	23377.	26443.	29137.	31515.	33711.
9	8760.	23150.	57900.	55283.	60755.	68047.	74970.	81099.	86748.
10	5247.	16413.	26870.	25657.	27871.	31579.	34702.	37936.	40258.
11	2071.	2267.	2390.	2248.	2446.	2400.	2595.	2779.	2912.
12	4448.	6372.	7630.	7383.	8021.	9088.	10713.	10831.	11586.
13	163370.	218369.	211040.	201500.	21896.	217561.	230720.	246412.	257913.
BEFORE ADJUSTMENT			598617.	649530.	740780.	790311.	849291.	910362.	
SUM & CO. PROJ. USED FOR ADJ			571558.	620013.	658341.	716297.	771661.	819530.	

## PRINCE GEORGES

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	8410.	20914.	22850.	21661.	23719.	26790.	29482.	32190.	33772.
2	31003.	41885.	40100.	39534.	43293.	42972.	46008.	49304.	50434.



3	3301.	4451.	5900.	5876.	6435.	7268.	7998.	8733.	9161.
4	1910.	2290.	2350.	2340.	2563.	2553.	2805.	3035.	3145.
5	7301.	16705.	20300.	20217.	22139.	25005.	27517.	30045.	31521.
6	54335.	106350.	105300.	104870.	114836.	129707.	142734.	155849.	163504.
7	3011.	21715.	26300.	26193.	28682.	32396.	35650.	38925.	40837.
8	16118.	1485.	1500.	1494.	1636.	1552.	1669.	1760.	1774.
9	11943.	27623.	27000.	27503.	30116.	34017.	37433.	40873.	42801.
10	11204.	31579.	38000.	38641.	42314.	47793.	52593.	57426.	60246.
11	4709.	7932.	9050.	9013.	9870.	11147.	12267.	13395.	14052.
12	23530.	55965.	58850.	56576.	61953.	69775.	77074.	84079.	88210.
13	14192.	30318.	34500.	34359.	37624.	42497.	46715.	51062.	53670.
14	6345.	29161.	28900.	28632.	31408.	35475.	39039.	42625.	44719.
15	3721.	6969.	11850.	11892.	12923.	14577.	16063.	17539.	18407.
16	16002.	15491.	14550.	14491.	15868.	14835.	15223.	16191.	15966.
17	68547.	75728.	73000.	72702.	79611.	76689.	81701.	86594.	87172.
18	26754.	42670.	41100.	40932.	44822.	46099.	50211.	54759.	57344.
19	15895.	21909.	20800.	20921.	22910.	22903.	24668.	26549.	27315.
20	12483.	37139.	37000.	37000.	40516.	45763.	50359.	54986.	57680.
21	30855.	61683.	63300.	63041.	69037.	77972.	95304.	93687.	98289.
BEFORE ADJUSTMENT			680629.	751392.	812630.	935125.	1019471.	1102453.	
SUM & CO. PROJ. USED FOR ADJ			677848.	742269.	803025.	953293.	950572.	990170.	

## QUEEN ANNE

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	2095.	2163.	0.	2269.	2198.	2193.	2228.	2278.	2312.						
2	1555.	1846.	0.	2064.	2000.	1995.	2027.	2073.	2104.						
3	3591.	3564.	0.	3785.	3667.	3659.	3718.	3800.	3853.						
4	3114.	3832.	0.	4357.	4221.	4211.	4280.	4374.	4440.						
5	3375.	3896.	0.	4301.	4167.	4157.	4225.	4318.	4383.						
6	975.	919.	0.	953.	923.	921.	936.	957.	971.						
7	1864.	2202.	0.	2456.	2380.	2374.	2413.	2467.	2504.						
BEFORE ADJUSTMENT			19003.	23683.	26130.	26680.	26527.	27063.							
SUM & CO. PROJ. USED FOR ADJ			20186.	19546.	19510.	19828.	20267.	20572.							

## ST. MARY'S

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	3496.	4219.	0.	4550.	4816.	5017.	5111.	6599.	6916.						
2	2970.	3494.	0.	3722.	3997.	4255.	4711.	5057.	5332.						
3	5023.	5811.	0.	6140.	6593.	6981.	7731.	8291.	8751.						
4	1853.	2158.	0.	2285.	2453.	2601.	2880.	3092.	3260.						
5	2481.	3285.	0.	3706.	3980.	4494.	4976.	5342.	5633.						
6	3841.	5283.	0.	6071.	6519.	7362.	8153.	8752.	9229.						
7	2392.	2976.	0.	3257.	3498.	3950.	4374.	4695.	4951.						
8	16510.	19837.	0.	21348.	22923.	25837.	28668.	30775.	32448.						
9	344.	325.	0.	322.	346.	347.	372.	395.	407.						
BEFORE ADJUSTMENT			49334.	58096.	66465.	72451.	79533.	86257.							
SUM & CO. PROJ. USED FOR ADJ			51400.	55195.	61395.	67977.	72967.	76926.							

## SOMERSET



MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	2144.	2181.	0.	2161.	2274.	2289.	2320.	2327.	2329.						
2	617.	649.	0.	684.	681.	692.	701.	704.	704.						
3	1587.	1452.	0.	1452.	1460.	1470.	1489.	1494.	1495.						
4	1292.	1343.	0.	1408.	1415.	1425.	1443.	1448.	1449.						
5	903.	837.	0.	842.	847.	853.	864.	867.	867.						
6	847.	788.	0.	794.	798.	804.	814.	818.	819.						
7	3816.	3110.	0.	3020.	3037.	3058.	3078.	3083.	3091.						
8	1525.	1706.	0.	1853.	1864.	1876.	1901.	1907.	1909.						
9	509.	458.	0.	454.	456.	459.	461.	467.	468.						
10	685.	645.	0.	652.	650.	661.	669.	671.	672.						
11	324.	287.	0.	282.	284.	286.	289.	290.	290.						
12	1327.	1592.	0.	1700.	1800.	1812.	1936.	1841.	1844.						
13	1013.	1070.	0.	1130.	1137.	1144.	1159.	1162.	1165.						
14	810.	773.	0.	789.	793.	765.	771.	773.	773.						
15	2221.	2042.	0.	2047.	2058.	2072.	2099.	2105.	2108.						
BEFORE ADJUSTMENT			19034.	19507.	20335.	20572.	20727.	20850.							
SIJM & CO. PROJ. USED FOR ADJ			19458.	19568.	19647.	19700.	19762.	19854.							

## TALBOT

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	10127.	11167.	0.	11993.	12687.	12563.	13127.	13654.	14061.						
2	3874.	4413.	0.	4815.	5004.	5044.	5270.	5482.	5646.						
3	2906.	3364.	0.	3703.	3917.	3878.	4052.	4215.	4341.						
4	2714.	2761.	0.	2851.	3016.	3016.	3151.	3277.	3386.						
5	1957.	1975.	0.	2031.	2149.	2143.	2239.	2329.	2404.						
BEFORE ADJUSTMENT			26251.	27859.	28901.	30077.	31024.	32159.							
SIJM & CO. PROJ. USED FOR ADJ			25393.	26863.	26644.	27839.	28957.	29835.							

## WASHINGTON

MCD	1960	1970	1975	PROJ	1975	PROJ	1980	PROJ	1985	PROJ	1990	PROJ	1995	PROJ	2000
1	2051.	2054.	0.	2044.	2040.	2058.	2093.	2156.	2211.						
2	3529.	4057.	0.	4314.	4306.	4345.	4428.	4552.	4649.						
3	9589.	9257.	0.	8715.	8700.	8655.	8625.	8163.	8084.						
4	1909.	2071.	0.	2142.	2137.	2157.	2198.	2259.	2313.						
5	3509.	3582.	0.	3597.	3590.	3622.	3691.	3795.	3892.						
6	3105.	3084.	0.	3507.	3500.	3532.	3590.	3701.	3795.						
7	2445.	3454.	0.	4058.	4051.	4087.	4165.	4282.	4392.						
8	1440.	1571.	0.	1620.	1626.	1641.	1671.	1710.	1762.						
9	1677.	2267.	0.	2607.	2602.	2626.	2676.	2751.	2821.						
10	4124.	4761.	0.	5073.	5063.	5109.	5207.	5353.	5490.						
11	1364.	1415.	0.	1432.	1429.	1442.	1470.	1511.	1550.						
12	2612.	3393.	0.	3827.	3820.	3855.	3928.	4039.	4142.						
13	3406.	4107.	0.	4468.	4460.	4501.	4586.	4716.	4837.						
14	2876.	4481.	0.	4580.	4571.	4612.	4700.	4832.	4957.						
15	1592.	1595.	0.	1587.	1584.	1599.	1629.	1674.	1718.						
16	1700.	2182.	0.	2447.	2443.	2465.	2512.	2582.	2648.						
17	5311.	5487.	0.	5541.	5531.	5581.	5687.	5848.	5998.						
18	3931.	5126.	0.	5793.	5782.	5835.	5946.	6113.	6270.						
19	910.	1011.	0.	1058.	1055.	1065.	1086.	1116.	1144.						
20	1064.	1383.	0.	1560.	1557.	1572.	1601.	1647.	1689.						



21	5765.	6111.	0.	6249.	6237.	6294.	6413.	6594.	6763.
22	5938.	5688.	0.	5336.	5325.	5169.	5267.	5415.	5482.
23	2143.	2589.	0.	2820.	2815.	2840.	2895.	2975.	3052.
24	682.	827.	0.	903.	900.	909.	926.	952.	977.
25	10057.	9319.	0.	8602.	8596.	8246.	8403.	8640.	8713.
26	5232.	7346.	0.	104.	8598.	8667.	8331.	9080.	9313.
27	3258.	5310.	0.	5553.	5543.	5594.	5700.	5861.	6011.

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

115627. 121805. 127058. 128719. 129472. 132162.  
108745. 107842. 107839. 109739. 113034. 115598.

## WICOMICO

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	1493.	1459.	0.	1495.	1431.	1510.	1610.	1721.	1826.
2	1024.	964.	0.	983.	946.	998.	1064.	1137.	1206.
3	1116.	1195.	0.	1270.	1217.	1259.	1345.	1428.	1504.
4	1542.	1823.	0.	2044.	1957.	2064.	2206.	2357.	2503.
5	11239.	12543.	0.	13637.	13058.	13777.	14717.	15732.	16699.
6	815.	721.	0.	739.	707.	746.	796.	851.	902.
7	1182.	1188.	0.	1221.	1169.	1233.	1317.	1408.	1494.
8	1871.	2239.	0.	2527.	2419.	2513.	2707.	2914.	3094.
9	8331.	9960.	0.	11235.	10757.	11349.	12124.	12960.	13756.
10	1213.	1197.	0.	1226.	1174.	1239.	1321.	1412.	1498.
11	2136.	2192.	0.	2279.	2182.	2302.	2459.	2628.	2790.
12	1246.	1103.	0.	1130.	1082.	1142.	1218.	1301.	1380.
13	9045.	11143.	0.	12142.	11626.	12265.	13102.	14005.	14867.
14	1231.	1084.	0.	1111.	1063.	1122.	1197.	1278.	1356.
15	1324.	1558.	0.	1743.	1659.	1760.	1831.	2010.	2133.
16	3342.	3867.	0.	4286.	4104.	4330.	4626.	4944.	5249.

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

54773. 55924. 57783. 57958. 59064. 60156.  
59072. 56562. 59649. 63710. 68039. 72257.

## WORCESTER

MCD	1960	1970	1975 PROJ	1975 PROJ	1980 PROJ	1985 PROJ	1990 PROJ	1995 PROJ	2000 PROJ
1	5262.	5843.	0.	6354.	6990.	7600.	8223.	8846.	9491.
2	4522.	4671.	0.	4911.	5411.	5854.	6253.	6719.	7125.
3	6195.	6136.	0.	6803.	7500.	8144.	8874.	9612.	10300.
4	896.	805.	0.	854.	940.	999.	1063.	1134.	1191.
5	1599.	1485.	0.	1590.	1762.	1890.	2030.	2179.	2308.
6	0.	0.	0.	0.	0.	0.	0.	0.	0.
7	526.	525.	0.	585.	644.	699.	762.	827.	886.
8	2021.	1467.	0.	1410.	1553.	1687.	1751.	1866.	1956.
9	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	2712.	3510.	0.	4100.	4516.	4904.	5444.	5934.	6413.

BEFORE ADJUSTMENT  
SUM & CO. PROJ. USED FOR ADJ

27351. 28032. 29210. 31049. 32383. 33985.  
2621. 29325. 31776. 34401. 37157. 39669.

NORMAL EXIT. EXECUTION TIME: 2995 MILLISECONDS.

QFIN

DO NOT CIRCULATE

RUNID: DAVE ACCT: . . . PROJECT: SPOTTY  
TIME: MEMORY: 00:00:09.600 I/O: 00:00:02.932  
CPU: 00:00:06.357 WAIT: 00:13:39.440  
CC/ER: 01:00:16.695  
IMAGES READ: 70 PAGES: 3  
START: 15:19:59 NOV 25 1977 FIN: 16:30:11 NOV 25 1977  
ACCOUNT NUMBER? QTERM



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BINDERY INC.



MAY 85

N. MANCHESTER,  
INDIANA 46952



